Attorney's Docket No. <u>017753-200</u>
DT1. 2005

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re F	atent Application of	
Manue	el Rosa-Calatrava et al.	Group Art Unit:
Applic	ation No.: NEW	Examiner:
Filed:	January 10, 2005	Confirmation No.:
For:	MODIFIED ADENOVIRAL FIBER WITH ABLATED TO CELLULAR RECEPTORS	

FIRST INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure as set forth in 37 C.F.R. § 1.56, the accompanying information is being submitted in accordance with 37 C.F.R. §§ 1.97 and 1.98.

The documents are being submitted within three (3) months of the filing or entry of the national stage of this application or before the first Office Action on the merits, whichever is later. Since these documents are being filed within the time period set forth in 37 C.F.R. § 1.97(b), no fee or statement is required.

To assist the Examiner, the documents are listed on the attached form PTO-1449. It is respectfully requested that an Examiner initialed copy of this form be returned to the undersigned.

By:

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

Date <u>January 10, 2005</u>

Teresa Stanek Rea Registration No. 30,427

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Substitute for form 1449A/PTO & 1449B/PTO				Complete if Knpwg					
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STAT	TEMEN	ГВҮ	APPLICANT	First Named Inventor	Manuel Rosa-Calatrava et al.				
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Sheet	1 1	of	2	Attorney Docket Number	017753-200				

	U.S. PATENT DOCUMENTS				
Examiner Initials	Document Number	Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Issue/Publication Date (MM-DD-YYYY)	

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			FOREIGN PATENT DO	CUMENTS	A						
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Examiner Initials	Document Number	Kind Code (if known)	Country	Date of Publication (MM-DD-YYYY)	Translation	Partial Translation	Eng. Lang. Summary	Search Report	IPER	Abstract	Cited in Spec
	WO 02/096939		PCT	12-05-2002	F# -	11-71			ust.		3-1
	WO 03/062400		PCT	07-31-2002							

	NON-PATENT LITERATURE DOCUMENTS					
Examiner Initials	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.					
	P. LEISSNER et al., "Influence of adenoviral fiber mutations on viral encapsidation, infectivity and <i>in vivo</i> tropism," GENE THERAPY, Macmillan Press Ltd., Basingstoke, GB, Vol. 8, No. 1, 2001, pp. 49-57					
	D.A. EINFELD et al., "Reducing the native tropism of adenovirus vectors requires removal of both CAR and integrin interactions," J. VIROL., Vol. 75, No. 23, December 2001, pp. 11284-11291					
	M.C. DECHECCHI et al., "Heparan sulfate glycosaminoglycans are receptors sufficient to mediate the initial binding of adenovirus types 2 and 5," J. VIROL., Vol. 75, No. 18, September 2001, pp. 8772-8780					
	M.C. DECHECCHI et al., "Heparan sulfate glycosaminoglycans are involved in adenovirus type 5 and 2-host cell interactions," VIROLOGY, Academic Press, Orlando, FL, Vol. 268, No. 2, 15 March 2000, pp. 382-390					
	M.J. VAN RAAIJ et al., "Structure of the human adenovirus serotype 2 fiber head domain at 1.5 A resolution," VIROLOGY, Academic Press, Orlando, FL, Vol. 262, No. 2, 30 September 1999, pp. 333-343					

Examiner	Date	
Signature	Conside	ered
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^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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	F	FIRST	Application Number	* 50/520020
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STATEMENT BY APPLICANT			T First Named Inventor	Manuel Rosa-Calatrava et al.
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Sheet	7	of 2	Attorney Docket Number	017753-200

	U.S. PATENT DOCUMENTS				
Examiner Initials	Document Number	Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Issue/Publication Date (MM-DD-YYYY)	
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	FOREIGN PATENT DOCUMENTS										
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Examiner Initials	Document Number	Kind Code (if known)	Country	Date of Publication (MM-DD-YYYY)	Translation	Partial Translation	Eng. Lang. Summary	Search Report	IPER	Abstract	Cited in Spec
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NON-PATENT LITERATURE DOCUMENTS						
	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. J.L. JAKUBCZAK et al., "Adenovirus type 5 viral particles pseudotyped with mutagenized fiber proteins show diminished infectivity of coxsackie B-adenovirus receptor-bearing cells," JOURNAL OF VIROLOGY, Vol. 75, No. 6, March 2001, pp 2972-2981					
	I. KIRBY et al., "Identification of contact residues and definition of the Car-binding site of adenovirus type 5 fiber protein", JOURNAL OF VIROLOGY, The American Society for Microbiology, US, Vol. 74, No. 6, March 2000, pp. 2804-2813					
	I. KIRBY et al., "Mutations in the DG loop of adenovirus type 5 fiber knob protein abolish high-affinity binding to its cellular receptor car," JOURNAL OF VIROLOGY, The American Society for Microbiology, US, Vol. 73, No. 11, November 1999, pp. 9508-9514					
	MONIKA: "Transductional targeting with recombinant adenovirus vectors," CURRENT GENE THERAPY, Vol. 2, No. 3, September 2002, pp. 323-339					

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Signature	Considered
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